REMARKS

Claims 1-14 are presently in the application.

Claim Rejections – 35 USC § 102

Claims 1-2 are rejected under 35 USC 102(e) as being anticipated by Baertsch et al. (US Patent No. 6,470,071) This rejection is respectfully traversed for the following reasons.

The Examiner points to event queue 322 as being part of the detector framing node 304 and operating at kernel mode. However, the Applicant respectfully submits that only the detector framing node device driver 314 operates at kernel mode, not the detector framing node 304. Therefore, the Examiner's allegation that Baertsch teaches "storing said sequence of commands in a command queue to be accessible from a privileged mode level of said computer system" is incorrect.

Baertsch describes a real time data acquisition system including a decoupled host computer. Commands are executed in real-time in a hardware device, namely the detector framing node 304, which is independent from a host computer 114 as illustrated in figures 1 and 15. Detector framing node 304 is described in column 13, lines 62-67 as a single PCI card having FPGAs and other circuitry thereon. Therefore, kernel mode or privileged mode does not apply to the detector framing node 304.

Commands are stored in event queue 322 of the detector framing node 304. As per figure 15, a user application 301 running on the host computer 114 communicates with the detector framing node 304 through the detector framing node device driver 314 (also running on the host computer 114). While the

2

detector framing node device driver 314 operates on the host computer 114 in kernel mode, the detector framing node 304 does not.

The host computer 114 is involved in sending the set of commands to the hardware device, but is entirely removed from the actual execution thereof. This is evidenced by the passage found at column 14, lines 50 – 60: "The extent of real-time control allotted to host computer 114 is confined to a determination of when event sequence 312 will begin. Subsequently, host computer 114 is completely removed from image acquisition.(…)Therefore, host computer 114 is involved in pre- and post processing roles, and is therefore entirely removed from real-time operation."

Therefore, the set of commands is stored in the hardware device and executed by the hardware device. The privileged mode of the computer system is used only to send the set of commands to the hardware device. Once stored in the event queue 322, the sequence of commands is no longer accessible from a privileged mode of the host computer.

The Applicant respectfully requests that the rejection against claims 1-2 be withdrawn.

Claim Rejections – 35 USC § 103

Claims 3-14 are rejected under 35 USC 103(a) as being unpatentable over Baertsch et al. in view of Dingwall et al. (US 5,903,752).

Dingwall et al. does not address the deficiencies of Baertsch. For at least the reasons presented above, the Applicant respectfully requests that the rejection of claims 3-14 be withdrawn.

Conclusions

It is believed that Claims 1-14 are allowable over the prior art and a Notice of Allowance is earnestly solicited.

Respectfully submitted,

Michel Doyon et al.

By:
　　　/ALEXANDRA DAOUD/

Alexandra Daoud
Registration No 55,992
Customer Number: 020988